EOSDIS Core System Project

Property Management Plan for the ECS Project

Final

June 2002

Raytheon Company
Upper Marlboro, Maryland

Property Management Plan
for the ECS Project

Final

June 2002

Prepared Under Contract NAS5-60000
CDRL Item #110

RESPONSIBLE ENGINEER

William A. Wyman /s/   5/31/02
_____
William A. Wyman, ILS Manager   Date
EOSDIS Core System Project

SUBMITTED BY

Gary Sloan /s/   6/3/02
_____
Gary Sloan, M&O Manager   Date
EOSDIS Core System Project

Raytheon Company
Upper Marlboro, Maryland

602-CD-001-004

This page intentionally left blank.

Preface

This document is a formal contract deliverable with an approval code 1. It requires Government review and approval prior to final contract acceptance. This document is under ECS contractor configuration control. Contractor approved changes are handled in accordance with the change control requirements described in the ECS Project Configuration Management Plan. Changes to this document will be made by document change notice (DCN) or by complete revision.

Any questions should be addressed to:

Data Management Office
The ECS Project Office
Raytheon Systems Company
1616 McCormick Drive
Upper Marlboro, MD 20774-5301

This page intentionally left blank.

Abstract

This Property Management Plan for the ECS Project addresses management of ECS Contractor-acquired commercial off-the-shelf (COTS) hardware and software and government-furnished property (GFP) until NASA accepts it. This also includes management of Contractor-acquired property and GFP in which the ECS Contractor has direct maintenance and operations (M&O) responsibility.

Keywords: COTS, M&O, GFP, DCMAO, EDS, ILS, ILM database, Property Administration, Purchase Order, Bill of Material, Inventory, Material, EIN, Maintenance Work Order, GSFC Form 20-4, DD Form 250, Property, Equipment

602-CD-001-004

This page intentionally left blank.

Change Information Page

List of Effective Pages	
Page Number	**Issue**
Title	Submitted as Final
iii through xii	Submitted as Final
1-1 through 1-2	Submitted as Final
2-1 through 2-2	Submitted as Final
3-1 through 3-4	Submitted as Final
4-1 through 4-14	Submitted as Final
AB-1 through AB-2	Submitted as Final

Document History			
Document Number	**Status/Issue**	**Publication Date**	**CCR Number**
194-602-OP1-001		July 1994	
602-CD-001-002	Submitted as Final	June 1999	99-1320A
602-CD-001-003	Submitted as Final	April 2001	01-0274
602-CD-001-004	Submitted as Final	June 2002	02-0416

This page intentionally left blank.

602-CD-001-004

Contents

Preface

Abstract

1. Introduction

2. Related Documents

3. Property Organization and Responsibilities

4. Property Management Process

602-CD-001-004

List of Figures

Abbreviations and Acronyms

This page intentionally left blank.

602-CD-001-004

1. Introduction

1.1 Identification

This plan is prepared in compliance with Contract Data Requirements List (CDRL) item 110 as required by the Earth Observing System Data and Information System (EOSDIS) Core System (ECS) contract NAS5-60000.

1.2 Scope

This plan addresses management of ECS Contractor-acquired commercial off-the-shelf (COTS) hardware and software and Government-furnished property (GFP) until it is accepted by the Contracting Officer (CO) or the Contracting Officer's Technical Representative (COTR). This also includes management of contractor-acquired property and GFP in which the ECS contractor has direct maintenance and operations (M&O) responsibility.

1.3 Purpose

The purpose of this document is to identify responsibilities and procedures for the management and execution of ECS property management functions. This document has been revised to reflect the actual processes that are in practice and that are different from when the original document was produced. When approved by the Government, this document will establish the processes, policies, and procedures to be followed by the ECS contractor in managing, accounting for, and reporting contractor-acquired COTS hardware, software, and GFP.

The objectives of property management are to accomplish the following:

- Maintain control of ECS property from time of receipt until relief from accountability through approved means.

- Maintain accountability of ECS property through the establishment and maintenance of accountable records that provide accurate description, location, and condition status of the property.

1.4 Status and Schedule

This document was originated in July 1994 and was revised and approved by the government in June 1999. It was revised and approved again in April 2001. This revised document addresses the February 2002 DCMA audit recommendations and makes other minor changes to update the document.

602-CD-001-004

1.5 Organization

The remainder of this document is organized as follows:

Section 2: Identifies related documents for requirements or documents referenced in this plan.

Section 3: Identifies the organization and its responsibilities for the management and execution of ECS property management functions.

Section 4: Describes the processes and procedures for the execution of property management functions

A list of abbreviations and acronyms appears at the end of this document.

602-CD-001-004

2. Related Documents

2.1 Parent Documents

Not Applicable

2.2 Applicable Documents

The following documents are either referenced in this document, are directly applicable, or contain policies or other directives that are binding upon the content of this volume:

101-110-MG2	Procurement Management Plan for the ECS Project
NAS5-60000	ECS Contract, Clauses: E5, 6, and 10, F2 and 6, G5, 6, 15, 16, 17, 18,19, and 21
423-41-01	ECS Statement of Work
420-05-03	Performance Assurance Requirements for the ECS Project
NHB 4200.1C	Equipment Management Manual

This page intentionally left blank.

3. Property Organization and Responsibilities

3.1 Organization

Raytheon Systems Co., (RSC) is solely responsible to the Government for the accountability, control, and reporting of contractor-acquired property and Government furnished property (GFP) during the execution of the ECS contract. As such, RSC will manage ECS property management functions performed by subcontractors.

ECS property will be located at and controlled by Property Administrators at the following sites:

- Goddard Space Flight Center (GFSC), Greenbelt, MD
- Earth Resources Observation Systems (EROS) Data Center (EDC), Sioux Falls, SD
- Jet Propulsion Laboratory (JPL), Pasadena, CA
- Langley Research Center (LaRC), Hampton, VA
- University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, CO
- University of Alaska Synthetic Aperture Radar (SAR) Facility (ASF), Fairbanks, AK
- ECS Development Facility (EDF), Upper Marlboro, MD
- EMOS Development Facility (EDF), Englewood, CO
- ECS Synergy Sites as determined by the ECS Contracting Officer

Instrument Support Team (IST) sites, as directed by the ECS Contracting Officer.

Additional locations may be incorporated into the ECS as operational needs warrant. The ECS organizations will share facilities belonging to the institutional hosts. Host facilities will support property management operations by providing space for maintenance, parts, tools, material and consumable storage, and personnel and will provide external communications.

Figure 3-1, "Property Management Roles," identifies the ECS personnel involved in managing and executing ECS property functions.

The following section addresses the property management roles and responsibilities of ECS Project personnel.

3.2 Responsibilities

The RSC ECS Contracts Manager is responsible for subcontracts management and reporting the following to the Government Property Administrator (GPA): loss, damage, and or destruction of contractor-acquired property and GFP, revisions of the ECS property management procedures, and submission of an annual NASA Form 1018.
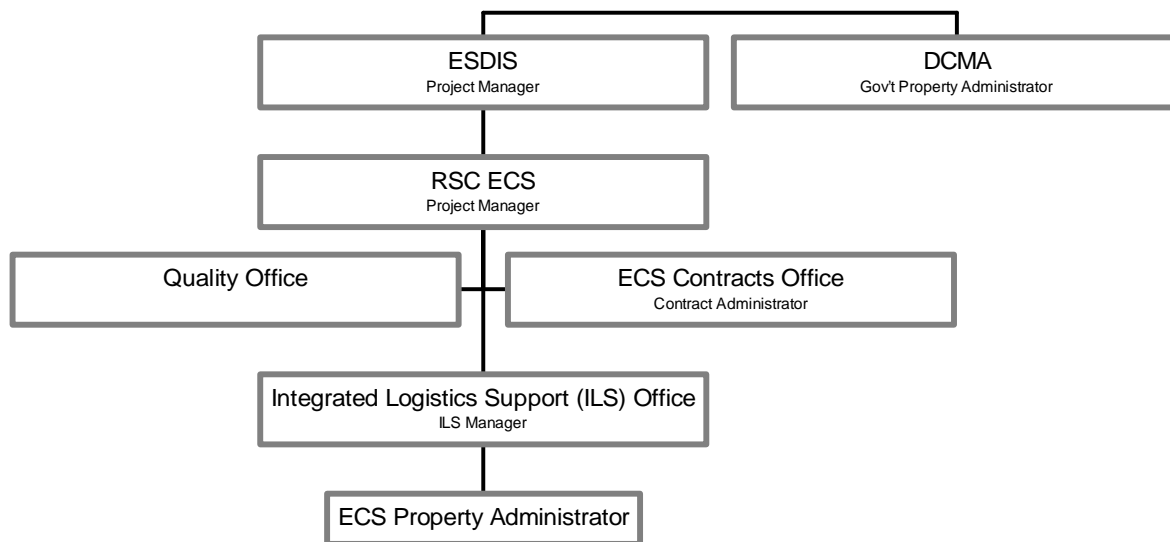
602-CD-001-004

Figure 3-1. Property Management Roles

The Integrated Logistics Support (ILS) Manager, under the general direction of the Maintenance and Operations Manager and the RSC ECS Contracts Manager, is responsible for the execution of the ECS property management program. This includes development of policies and procedures for ECS-wide property administration, management of property administration resources, and property accountability and reporting.

The Defense Contract Management Agency (DCMA) is the Government Property Administrator (GPA), who is responsible for oversight of ECS property administration. As such, DCMA, through ESDIS, will support the Project in the review of this plan and the processes, procedures, and systems used in the administration of ECS property.

3.2.1 Property Administration

The ECS Property Administrator within the ILS Office at the EDF is responsible for the establishment and maintenance of ECS property records using the Inventory and Logistics Management (ILM) database. The ECS Property Administrator is the focal point regarding the execution of property administration functions ECS-wide and for maintaining control and accountability of contractor-acquired and GFP property at the EDF. The ECS Property Administrator coordinates and monitors property actions of site Property Administrators.

The Property Administrator designated at each ECS Distributed Active Archive Center (DAAC) performs property administration for the site's material. Site Property Administrators are responsible for the receipt, inspection, storage, issue, inventory, recording, accounting, and reporting of ECS property at ECS sites. Property Administrators will follow the policies and procedures approved in this Plan, ECS Project Instructions, and ECS-approved local procedures developed between site Property Administrators and local site property control offices. Locally developed procedures will be reviewed by the ILS Manager to ensure that they are in

conformance with provisions of this Plan, ECS Project Instructions, procedures accepted by Government Property Administrator, and are conducive to the maintenance of control and accountability of ECS property at all sites.

The ECS DAAC Manager will designate site Property Administrators in writing. Prior to the transfer of responsibility from one Property Administrator to another, the ILS Manager will verify that the incoming Property Administrator has been adequately prepared to assume his/her responsibilities, that a site inventory is performed and the results recorded, and that accountable records are current.

3.2.2 Procurement Office

The purchase of ECS COTS material, software, repair parts, and consumables is the responsibility of the Procurement Office. The Procurement Office is operated by Electronic Data Systems (EDS), an ECS subcontractor, under the direction of the ECS Business Operations Office and the Contracts Manager. Once COTS property is acquired, control and accountability of the property (including transfers between ECS sites or to other contracts) is the responsibility of the ILS Manager.

This page intentionally left blank.

4. Property Management Process

This section describes the processes to be performed in the execution of the ECS property management functions. The property management process is depicted in Figure 4-1.
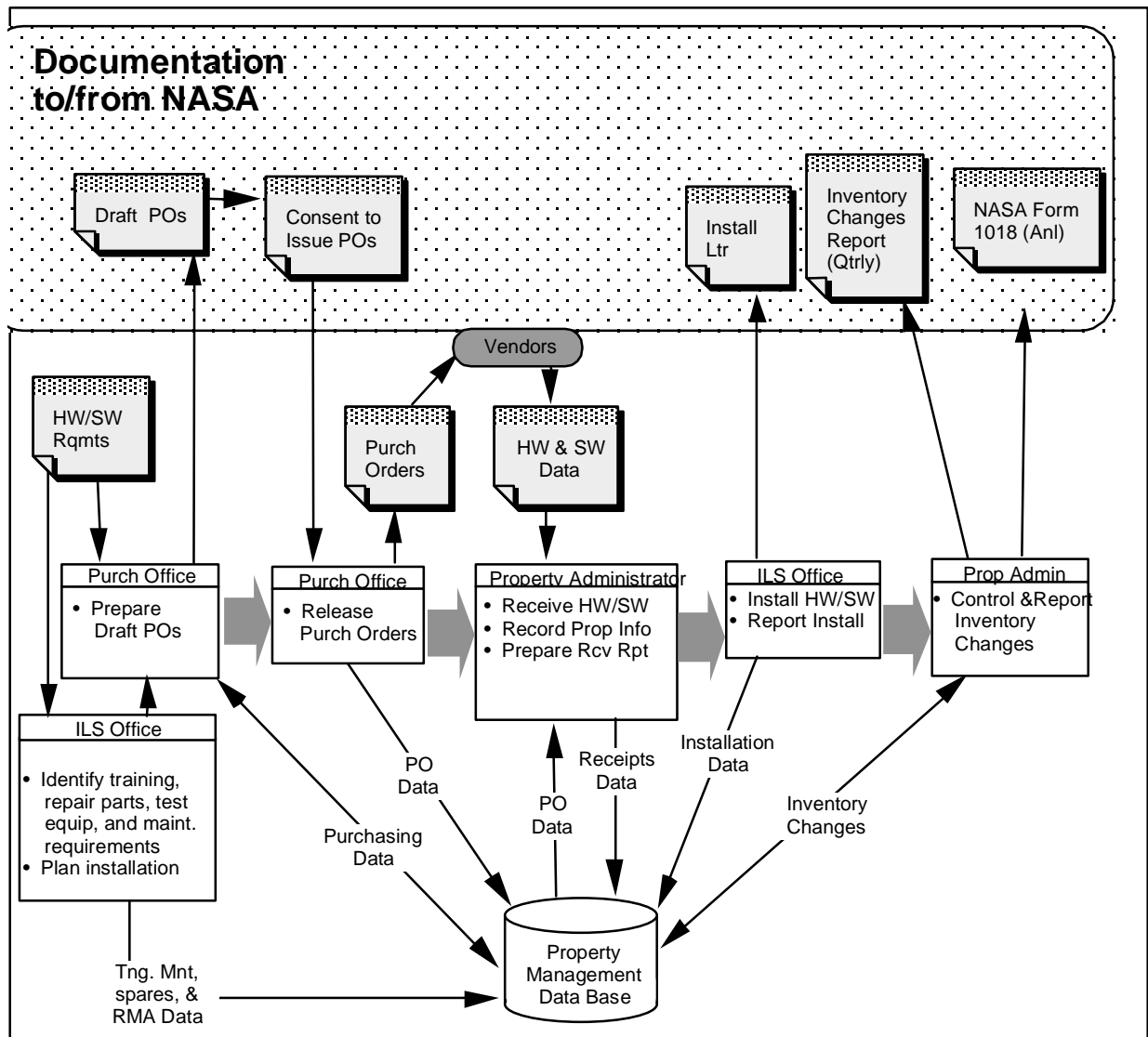

Figure 4-1. Property Management Process Flow

4.1 Property Management

RSC will maintain an adequate property control system for government property that will meet the guidelines of FAR 45.5. The RSC ECS Project Manager, having overall responsibility and authority for the ECS contract, is considered "managerial personnel" with regards to the FAR.

4.2 Acquisition

The ECS Procurement Office will obtain the Contracting Officer's written consent before placing any subcontract for which advanced notification is required. ECS contractor requests for Government-owned equipment must obtain the Contracting Officer's consent.

Prior to purchasing ECS material or facilities (including plant equipment) the EDS Procurement Office will submit through the RSC ECS Contracts Manager to the NASA ECS Contracting Officer (CO) or Hardware Planner a consent package for review. A consent package consists of a signed configuration change request (CCR), bill of material (BOM), and EDS purchase order (PO).

The NASA ECS CO or Hardware Planner will return the consent package with a signed approval letter to the ECS procurement office to purchase the item(s). Upon the receipt of the NASA CO's consent to purchase, the procurement office will purchase the material using the PO and provide the ECS property administrator a copy of the returned PO and a detailed BOM.   The ECS PA will use these documents to monitor material due in, reconcile receipts against what is ordered, and configure the material when received.

4.3 Receiving

All Contractor-acquired property, vendor-loaned property, and GFP entering an ECS facility (i.e., the EDF or an ECS site) will be received and processed by the site Property Administrator prior to its use. The following is a description of the process to be followed in the receipt and processing of ECS property. Procedures for receiving vendor-loaned property will be described in separate EDS project instructions.

4.3.1 Receiving Inspection

Upon arrival of ECS material or software, the site Property Administrator will perform a receiving inspection against the PO to verify correctness of delivery, quantity received, and to determine if there is evidence of damage during shipment. The Site Property Administrator will complete a Loading Dock Checklist verifying the number of pieces received against the shipper's bill of lading and the condition of the material. The following will be noted on the checklist: carrier name and bill of lading number, date and number of pieces received, description of discrepancies noted, and signature of person receiving the items. On the carrier's copy of the shipping document, the receiving individual will note any damage to the shipment and sign the Loading Dock Checklist, thereby acknowledging receipt of the shipment. The signature of the carrier's representative will be obtained when container shortages, damages, and other transit-related discrepancies are identified.

Property received will be promptly moved under the direction of the Site Property Administrator from the loading dock to a controlled inventory area for unpacking inspection, detailed component level inventory, and preparation of an Inventory Worksheet. Items received will be reconciled against purchase orders, transfer documents (e.g. GSFC Form 20-4), packing lists, or related documents to ensure accountability for all items, attachments, and accessories. Item identification, configuration, and quantity will be matched against the vendor's packing list, the purchase order, and the detailed configuration list (supplied by the Purchasing Office). For GFP having a NASA equipment control number (ECN), the ECN, serial and model numbers, and any other appropriate marking will be noted on the Inventory Worksheet for entry into the property record.

A copy of the inventory worksheet and shipping document will be forwarded electronically (i.e. fax or Internet) to the ECS Property Administrator within a day of receipt of the shipment (fax number is (301) 925-0741, Internet is <ecsprop@eos.hitc.com>). The original inventory worksheet will be attached to the shipping documents and retained in the site's property files as a permanent record of the property received. Such documents will be retained until accountability is transferred to the Government.

The inventory worksheet is used by the ECS PA to build the inventory records in the Inventory, Logistics, and Maintenance (ILM) database, which contains the master records of ECS property. The site property administrator changes will maintain site property records as a record of changes to the original data (i.e. maintenance failures/repairs, returns, and location).

Received property will be secured and protected from electrostatic discharge (ESD) during movement, storage, inspection, inventory, and during assembly, test and issue. ESD prevention and control procedures specified in ECS Project Instructions will be followed. Access to the property storage areas will be controlled at all times to prevent unauthorized entry.

4.3.2 Receipt Processing

The Receiving Process Checklist is attached to the bill of lading and filed by the Property Administrator as "Purchase Orders Received/Complete" or, in the case of an incomplete shipment, filed as "Purchase Orders Pending/Incomplete." Items received are reconciled against transfer documents, purchase orders, packing lists and related documentation to ensure accountability for all items purchased or requested. Discrepancies will be annotated on the Purchase Order and a COTS Non-Conforming Product Report will be completed and forwarded to the Purchasing Office for resolution.

For incomplete shipments, receiving personnel will make a copy of the PO, annotate the missing items, and return a copy of the PO to the Purchasing Office. The Purchasing Office will contact the vendor to obtain shipment information on the missing items. Misdirected or other discrepant property will be segregated and controlled pending disposition instructions from the Purchasing Office.

Receiving discrepancies are documented and given to the Purchasing Office for vendor notification and resolution. Applicable manufacturer model numbers, part numbers, and serial numbers are recorded on the COTS Non-Conforming Product Report for use in establishing a

non-conforming property record. Property records for ECS property will be recorded in the property database as quickly as possible but not later than 5 business days of initial receipt of the property.

4.3.3 Receipt Reporting

The receipt reporting requirements clauses stated in Sections G.5 and G.6 of the ECS contract will be followed upon receipt of further direction from the Government, as they apply to contractor acquired property. When received, the ILS Office as it applies to ECS sites will provide such direction.

The DD 250, "Material Inspection and Receiving Report," required by Contract Clause F.2, "Shipping Instructions," will be prepared at the completion of delivery of each release (i.e., at the Release Readiness Review) or when the material is formally delivered to NASA.

4.4 Identification

ECS property (i.e., contractor-acquired and GFP) will be tagged with ECS property tags. The Property Administrator will apply an ECS tag immediately after property is received and unpacked. ECS property tags are shown at Figure 3-2. Bar coded ECS property tags (on left below) are 5/8 by 1 13/16 inches and imprinted in black on a silver background displaying "Property of NASA/GSFC NAS5-60000." These tags contain a bar code with human-readable interpretation of the contractor-assigned equipment identification number (EIN). Property tags will be placed on the property in an area so that they are visible and easily accessible. Vendor-loaned and RSC capital property will not be tagged with ECS property tags.
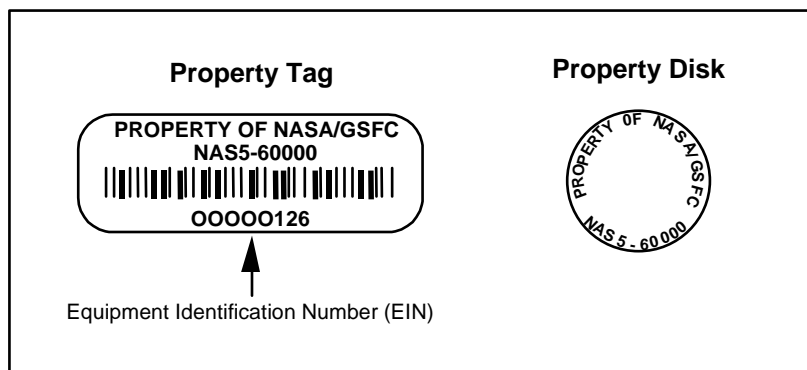
Figure 4-2. ECS Property Tags

Components installed inside ECS property, as well as media and documentation, will not be assigned an EIN tag. Such components will be controlled as inventory items and reported by manufacturer, description, model/version, serial number (if assigned), stock location, condition code, quantity, and, when installed as a component, by next higher assembly. The round property disk shown on the right above is applied to media, documents, and non-equipment items of GFP and contractor-acquired ECS property.

Property tags of GFP containing a NASA equipment control number (ECN) will not be removed. At the time of receipt of such property, the Property Administrator will affix an ECS property tag with EIN next to the government tag. The NASA ECN will be recorded in the property record and cross-referenced to the EIN.

Prior to disposing of ECS property (or prior to returning it to the Government), ECS property tags will be removed. Removed ECS property tags will be retained with the property turn-in document by affixing the tag to the document or to a blank sheet attached to the turn-in document. Turn-in documents will be returned to the ECS Property Administrator for retention in the accountable records.

4.5 Records

The ECS Property Administrator at the ECS Upper Marlboro, MD facility will maintain the official accountable records for Contractor-acquired property and GFP accountable to the ECS Project under contract NAS5-60000. These records are available for examination by Government Property Administrators upon request.

This section describes how ECS property records are established and maintained to account for and control Government property. ECS property records and procedures will conform to the FAR.

4.5.1 Property Management System

The ECS Project will use a UNIX database management system to support the property management, control, and reporting functions for Contractor-acquired, GFP, and vendor-loaned material. Property records will be created and maintained in this system and contain, at a minimum, the following information:

- Purchase Order Number

- Dates received and installed

- Item description, model number, and serial number

- Manufacturer

- Cost

- Location of property

- Contractor Equipment Identification Number (EIN)

- Government Equipment Control Number (ECN) for GFP

- GSFC Form 20-4 Control Number (for property transferred to/from the contract)

- Last inventory date

- Disposition date

Site Property Administrators will report property actions as quickly as possible but no later than 2 business days of property changes, including the following; receipt and/or installation of new property, relocations, completion of model/version changes, dispositions, changes in operational status of the property, and component configuration changes.

Support documentation used to post entries into the database will be provided to and retained by the ECS Property Administrator to provide complete, current, and auditable accountability data. Documents used for posting changes to property records include the following:

- **CCR** – Approved copy of CCR, BOM, and PO which are forwarded to the NASA Contracting Officer or Hardware Planner for his/her approval to purchase.

- **EDS Purchase Order** - Used for the purchase of COTS property, software, and material. Purchase orders are used to track material due in and to verify that items received are the same as those ordered. Discrepant receipts are noted and forwarded to the Purchasing Office to resolve.

- **Bill of Materials** - Created by the systems engineers and the Purchasing Office to verify that all components that should accompany purchased items have been received.

- **Loading Dock Checklist**- Used to record the physical condition of the property received, quantities received, shipping data, date received, and the name of the person who received and inspected the property.

- **Inventory Report** - Used by site Property Administrators to verify that an inventory has been conducted and to list any discrepancies noted during the inventory. Report will be signed and dated by the site Property Administrator.

- **Installation Receipt Report** - Used by the ECS Property Administrator to obtain acknowledgment of receipt by the user of all property installed. Also used to update property records with installed location, date, and name of the person accepting receipt.

- **Maintenance Work Order** - Used to record maintenance actions and relocation requests and resultant property changes (e.g., serial/model changes and component replacements) from maintenance actions on ECS property.

- **COTS Non-Conforming Product Report** – Used to record products that arrive at a site that are not in compliance with the PO or other accompanying information or that are not properly functioning at the time of assembly, burn-in, or installation.

- **System Verification Checklist** – Used by hardware technicians and systems engineers to ensure that hardware burn-in and operating system installation is completed satisfactorily.

- **Receiving Process Checklist** – Used by Property Administrators and system engineers to ensure that the receiving, inventory, burn-in and reporting processes were conducted properly.

- **NASA Form 1018** -- **NASA Property in the Custody of Contractors**– Submitted by the ILS office on an annual basis to report the value of property being controlled by the ECS contractor.

- **Inventory Worksheet** – Used by Property Administrators to record data about property that has been received and assigned parent and part EIN numbers.

- **NASA Form 20-4** -- **Transfer/Shipping Request**– Used to document the acceptance or transfer of NASA Government property.

- **DD Form 250** -- **Material Inspection and Receiving Report** – Used to deliver ECS property to NASA.

For consumable property (e.g., data storage media, paper, packaging material) and spare/repair parts, property records will include stockage quantities and shelf life.

4.6 Movement

Prior to shipping property to another site, the ECS Property Administrator will deliver a shipping report to the site Property Administrator. The shipping report will alert the site of the expected shipment date, carrier, shipping document number, estimated weight and cube, number of pieces, shipper, and ship-to address.

Prior to shipment, a pre-shipment inspection will be performed to verify the following:

- Correct identification of property on packing lists and shipping documents including configurations, serial numbers, number of containers, and ship-to address.

- Adherence to packaging and marking standards.

- Inclusion of appropriately prepared documents with shipping containers.

Generally, ECS property being shipped from vendors and the EDF will be shipped directly to and received by the site Property Administrator. Local policy at some sites may require delivery to a site central receiving point. In such cases, written procedures will be developed between the site Property Administrator and site's central receiving office regarding notification of receipt, documentation required, and provisions for local delivery to the ECS facility. The delivery of ECS property to site central receiving points versus direct delivery to the ECS facility will be determined on a site-by-site basis by the ILS Manager.

4.6.1 Intra-site Relocations

Requirements for property relocation at the same site will be processed through the site's Property Administrator in order to maintain control and accountability of property inventories. If required by other procedures, the site Property Administrator will document the relocation request on a CCR and forward the CCR to the appropriate configuration control board (CCB) for approval. Configuration Control Board authorization may be required prior to reconfiguring/moving property or software within a DAAC or the EDF. When the relocation request is approved the site Property Administrator will document the change in either an MWO or an Excel spreadsheet or other suitable form to notify the ECS Property Administrator that the material has been relocated. When the relocation is completed, the site Property Administrator will, if required, report to the site CM Administrator that actions required by the CCR have been completed. The Site Property Administrator will then forward the completed MWO or other

documentation to the ECS Property Administrator. The ECS Property Administrator will update the property records and applicable floor diagrams and network plans, as needed.

4.6.2 Inter-site Relocations

Requests to relocate property to another ECS site will be forwarded via a configuration change request (CCR) prepared by the requesting organization or ECS Systems Engineering. This CCR will be assigned to hardware engineers at the EDF so that they can present the CCR for ECS Configuration Control Board (CCB) approval. CCB approval is required prior to moving property or software between DAACs. When relocation is approved, the ECS Property Administrator will review the approved CCR for impact and coordinate the relocation between the losing and gaining Property Administrators. The gaining Property Administrator will report completion of the relocation to the ECS Property Administrator, who will update the property record with the new location and date of the action. Any loss or damage to the property will be reported when it occurs or is first discovered.

4.6.3 External Transfers

The CO must approve in writing any transfers of ECS property outside the ECS contract. Transfers of ECS property to the Government or to other contracts will be documented by the completion of GSFC Form 20-4 or DD Form 250, as directed by the CO.

Further, the CO must authorize in writing relocations of ECS property to sites other than those designated in Section 3.1. Examples of such relocations include relocations of property to a university or to an instrument support team (IST). These authorizations may take the form of a temporary loan or may involve permanent transfer of the property via GSFC Form 20-4 or other document designated by the CO. In either case, the signature of the gaining organization's authorized agent will be obtained and retained as a part of ECS property records.

4.6.4 Off-Site Vendor Repairs

For property returned to a vendor for repair, the applicable MWO will be retained in a "pending actions" file until the item is returned. It will identify date of shipment, expected return date, and vendor point of contact. Status code "F" (failure--out for repair) will be entered into the property record. ECS property tags will be removed and attached to the MWO. Once returned, the date of return will be recorded in the MWO, MWO closed, and serial number and EIN verified, and a new EIN tag applied. The property status code in the property record will be changed to reflect status "R" (received/in-stock). In the event the vendor replaces the original property because it is beyond repair, the Property Administrator will record the new item in the MWO as a replacement for the failed item and close the MWO. The Property Administrator will then archive the failed item property record and add the replacement item into the active inventory. The receiving actions described in paragraph 4.3 will be followed for inventory and receipt of the replacement item. If a vendor reports a failed item as unserviceable/non-repairable and does not replace the failed unit, the ECS Property Administrator will initiate procurement action to replace the item, initiate actions described in Section 4.10 to obtain relief from accountability, and archive the record of the failed unit.

4.7 Storage

ECS property will be stored in clean, orderly, and secure areas conforming to the environmental controls for temperature, humidity, and electrostatic discharge specified in the ECS Environmental Control Plan. Access will be limited to authorized personnel only and controlled by the site Property Administrator. ECS EINs will appear on all contractor acquired and GFP under ECS control to distinguish it from contractor and vendor-loaned property. Material will be inspected to determine serviceability before being stored. Material that is unserviceable will be segregated and disposed of following procedures described in Section 4.14.

Contractor-owned and vendor-loaned property will be segregated from Government-owned property during storage. Site Property Administrators will ensure that storage areas are kept in a clean, orderly manner. Material will be stored on shelves or in bins or drawers, as appropriate, and its storage location entered into the property record. Special storage areas or controls will be provided for items subject to corrosion, humidity, temperature, and shelf life limitation. Such items will be inspected semi-annually.

4.8 Physical Inventories

Site Property Administrators will complete a 100 percent physical inventory of ECS property at the sites annually. Notification of the scheduled date of the inventory will be provided to the ECS Property Administrator 30 days prior to the inventory start date. Personnel from the EDF may travel to DAACs to oversee the annual property inventory. ECS personnel responsible for maintaining property records will not assist in the conduct of these inventories. Inventories will be designed to achieve the following objectives:

- Verify that recorded property is still on hand

- Confirm or determine current location and custodial responsibility for property and material

- Identify unrecorded property, which qualifies for control

- Locate or identify missing property

- Identify unused or underutilized property as well as material in need of repair or rehabilitation

Results of site inventories, including the identification of any discrepancies noted, will be reported promptly to the Government Property Administrator. The ECS Property Administrator will assist sites in resolving discrepancies. If relief from accountability is granted by the GPA, the ECS Property Administrator will make appropriate inventory adjustments to the property database.

Site performance assurance personnel will audit the site property records and inventory results at least annually. Such audits will be conducted to verify that property administration procedures are being followed, are effective, and that inventories are being conducted in a manner that results in accurate accountability. Site quality assurance personnel will submit to the ECS Quality Office the results of annual property audits and maintain a historical file of audit results.

4.9 Reports

4.9.1 Quarterly Reporting

A listing of contractor-acquired property received during the reporting period will be reported within 30 days following each calendar quarter, (i.e., January, April, July and October). Listings will include item description, manufacturer, model, serial number, cost, location, and ECN (if assigned). Reports will be submitted to the CO and the Supply and Equipment Management Office, Code 235.1. Property previously reported on GSFC Form 20-4 or equivalent and GFP will be included in these quarterly reports.

4.9.2 Annual Reporting

The ILS Office will prepare NASA Form 1018, "Report of Government-Owned/Contractor-Held Property,"and submit the original to the Financial Officer and 3 copies to the DCMC Property Administrator not later than 31 October of each year. This report will be prepared using data contained in the property management database.

4.10 Consumption

Consumables, expendables, and repair parts will be controlled as inventory items. Consumption of these items will be accounted for by recording all purchases, receipts, issues, and maintaining identity of balance on hand and balance on order. Issues will be accounted for by date, quantity, and to whom issued. The ILS Office will establish reorder quantities based on ECS M&O requirements and review these levels semi-annually. Any item having storage limitations (i.e., limited storage life) or requiring a controlled environment will be identified in its property record. Limited storage life items will be issued on a first-in first-out (FIFO) basis. Receipts and issues of Government property will be performed as documented in Section 4.3 of this Plan. The identification of excess property will be reported as described in Section 4.14.

4.10.1 Reporting of Loss, Damage, and Destruction of ECS Property

If Government property in the possession of the Contractor is lost, damaged, or destroyed, the ECS Property Administrator will notify the RSC Contracts Manager, who will notify the Government Property Administrator immediately by telephone upon discovery and follow up with a written report as soon as the facts become known. The report and statement of loss will contain the following factual data as to the circumstances surrounding the loss:

- Contractor's name and contract number
- Description of items lost, damaged, or destroyed
- Cost of property lost, damaged, or destroyed and cost of repairs in instances of damage (if actual costs are not known, reasonable estimates will be given)
- Date, time, and cause of the loss, damage, or destruction

- Actions taken by the Contractor to prevent further loss, damage, or destruction and to prevent repetition of similar incidents

- Other facts or circumstances relevant to the determination of liability and responsibility for repair or replacement

- Statement that no insurance costs or other means of covering loss, damage, or destruction of Government property were charged to the contract, if applicable

- Statement that, in the event the Contractor was or will be reimbursed or compensated for loss, damage, or destruction of Government property

4.11 Utilization

All property, either contractor-acquired or furnished by the Government will be used exclusively on authorized contracts. In the event other use can be made of specific property on other Government contracts, a request will be made in writing to the CO for written approval, either by letter or contract modification prior to use on other contracts.

Only authorized personnel performing functions in support of the ECS Project will use ECS property. Property Administrators will ensure that users of ECS property are aware of the provisions of this Plan, Project Instructions, and local procedures regarding the use, control, reporting, and disposition of ECS property, and that it is used in accordance with ECS contractual requirements.

4.11.1 Control of Pilferable Material

Site Property Administrators will establish special controls for the security and identification of pilferable items. Pilferable items include any of the following: computer components, calculators, cameras, VCRs, tape recorders, television receivers, and any items that have a high loss history.

Pilferable items will be stored in a locked secure area when not in use. When issued, the primary user will sign for the item acknowledging receipt and responsibility. The primary user assumes responsibility for the surveillance and safekeeping of pilferable items and will report any changes of status, location, or use to the site Property Administrator. Pilferable items will not be loaned out of the possession or control of the person to whom they are assigned unless the Property Administrator is notified.

4.12 Maintenance

Preventive maintenance of ECS property will be performed in accordance with the frequencies and procedures recommended by the original equipment manufacturer. The Contractor's maintenance engineers or authorized vendor maintenance personnel will perform hardware preventive maintenance. The site maintenance personnel will maintain records of both scheduled and completed preventive maintenance. Corrective maintenance action records are initiated by the site logistics and maintenance coordinators (LMCs) using the MWO in the ILM system, who

will confirm maintenance actions taken and enter property and/or component change information as described below in the MWO upon completion of the action.

4.12.1 Warranty Management

The ECS Property Administrator will support the maintenance and warranty management functions by entering the receipt date of all property, spare parts, and software under warranty. Generally, ECS property and software will be procured with a one-year warranty starting at the date of receipt. Replacement repair parts and component warranties will vary dependent upon whether the manufacturer's standard warranty applies or whether an extended warranty has been purchased.

The ILS Office will manage warranty and maintenance contracts with COTS maintenance vendors. This information is used by the ILS Office to determine whether property is under warranty or contract maintenance support. As warranty/maintenance expiration dates approach, the ILS Office will determine the level of follow-on maintenance support required, select the maintenance source, and initiate actions with the Purchasing Office necessary to renew maintenance support coverage. Copies of maintenance support purchase orders will be provided to the ECS Property Administrator for posting to the property record.

4.12.2 Recording Maintenance Actions

Maintenance actions are documented by the site LMC in Maintenance Work Orders (MWOs) as they occur and at their closure. Inventory changes to ECS property and spares/repair parts resulting from maintenance actions will be recorded to the property record by the ECS Property Administrator from information provided by the LMC in the completed MWO. As property components are replaced at the sites, site Property Administrators will enter the date of the maintenance action and identification (with serial number) of the replaced part into the MWO. This information will be used to update the property record as well as identify the warranty start date for the replaced component.

4.13 Subcontract and Vendor Control

In the event any subcontracts are entered into where Government property will be involved, assurance will be made that RSC relates proper property control requirements to all of its subcontractors. The Government Property Administrator will be advised of all subcontracts under which Government property will be provided in performance of the subcontract.

4.14 Disposition

The ILS Office will request disposition instructions for excess property located at all ECS sites from the Plant Clearance Office, DCMA using the Plant Clearance Automated Reutilization Screening System (PCARSS) reporting system or Standard Form 1428, "Inventory Schedule B." Since decisions regarding disposition of the property will be based on the information provided in PCARSS report or the SF 1428, all fields must be completed and property must be adequately described to permit the Military Departments and Federal civilian agencies to determine whether

the property can be reused. Once the Plant Clearance Office provides disposition instructions, the ILS Office will forward them to the site Property Administrator for execution of disposition actions.

The ECS Property Administrator or Site Property Administrators will remove Contractor-applied property tags prior to release of the property for disposition. Site Property Administrators will provide disposition documents that provide relief from accountability to the ECS Property Administrator within five working days of receipt. The ECS Property Administrator will record disposal actions in the property database and retain all disposition documentation in its accountable record files for audit purposes until the end of the contract.

4.14.1 Government Furnished Property (GFP)

When the Government makes GFP available to the ECS contract, it will normally do so by transferring the property via GSFC 20-4, however a GSFC 20-4 may not be used in all instances. The government will determine what transfer documentation is appropriate for each situation. A GFP list is Attachment M to the ECS Contract. Upon transfer of the GFP, the ECS Property Administrator will inventory the property to verify serial, model, and ECN numbers and configurations and affix an ECS EIN tag to each item of property. If discrepancies are noted he will notify the Government transferring organization immediately and attempt to resolve the discrepancies. Once items received agree with the transfer document, the ECS Property Administrator will sign the GSFC 20-4 (if provided), enter the information into the property database, and return the original signed document to the transferring organization for forwarding to GSFC Code 235. In conjunction with the transfer of GFP the ILS Office will determine from the transferring organization maintenance/warranty terms (if any) of the property being transferred and initiate action to obtain maintenance funding for the property (if required).

4.14.2 Reporting Excess Government Property

Excess Contractor-acquired property and GFP at ECS sites will be reported by site Property Administrators to the ECS Property Administrator for disposition instructions. Excess property is defined as (1) usable property that no longer serves a useful purpose in meeting the requirements of the ECS contract, or (2) property that is unusable to the extent that repair or rehabilitation would exceed its replacement cost or 65 percent of the original acquisition cost.

Upon receipt of reports of excess property, the ECS Property Administrator will screen ECS-wide requirements for reuse within the ECS Project. If no ECS requirement exists, the ECS Property Administrator will submit a written report describing the property as potential excess to the NASA ECS Hardware Manager for screening by the ESDIS Project, NASA/GSFC, Code 423. If an ESDIS Project requirement exists, the property will be transferred to the Project via GSFC Form 20-4. If no ESDIS Project requirement exists, the NASA ECS Hardware Manager will notify the ECS Property Administrator, in writing that the property is infact excess to ESDIS. The ECS Property Administrator will then report the property as excess to the DCMA Plant Clearance Office, 217 E. Redwood Street, Baltimore, MD 21202-5299., The plant clearance office will screen for reuse to meet other Government requirements.

Upon completion of the screening period or at any stage during the screening cycle, the Plant Clearance Officer will provide disposition instructions for parts or the entire excess inventory. Disposition instructions will be executed in a timely manner as requested by the Plant Clearance Officer. All Government ID tags will be removed and markings obliterated prior to actual disposal of Government property that is sold, scrapped, or abandoned. Shipments of excess Government property will be made as directed by either the NASA ECS Hardware Manager or the Plant Clearance Officer only.

Excess Government property will be labeled as "Excess Government Property", segregated from all other properties, and stored in a secure area isolated from other inventory to prevent loss or unauthorized use until receipt of disposition instructions. Periodically, a physical inventory of excess Government property will be performed and records reviewed to validate inventory balances.

4.15 Property Close-out

Upon completion or termination of the ECS Contract, ECS Property Administrators will perform a final physical inventory of Government ECS property. After completion of all DD 250s transferring ECS property to the Government, the ECS Contracts Manager will submit a final NASA 1018 to the GPA indicating that all property has been transferred from the ECS contract. Inventory adjustments, liability determinations, and other property issues will be resolved before contract closeout. The ECS Contract Manager will obtain the Contracting Officer's statement of approval of contract close-out by submitting a letter to the CO and the GPA declaring that no ECS property remains on the contract that no credits are due to the Government, and that no outstanding balances are due to ECS suppliers.

Abbreviations and Acronyms

ASF	Alaska SAR Facility
CDRL	Contract Data Requirements List
CI	Configuration Item
CM	Configuration Management
CM/DM	Configuration Management and Data Management
CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
COTS	Commercial off-the-shelf
CSMS	Communications and Systems Management Segment
DAAC	Distributed Active Archive Center
DCMA-	Defense Contract Management Agency
DID	Data Item Description
ECN	Equipment Control Number
ECS	EOSDIS Core System
EDC	EROS Data Center
EDF	ECS Development Facility
EDS	Electronic Data Systems
EIN	Equipment Identification Number
EMOS	EOS Mission Operations Segment
EOS	Earth Observing System
EOSDIS	Earth Observing System Data and Information System
GFE	Government Furnished Equipment
GFP	Government Furnished Property
GPA	Government Property Administrator
GSFC	Goddard Space Flight Center
HW	hardware
I&T	Integration and Test

ILS	Integrated Logistics Support
IPO	Industrial Property Office
IV&V	Independent Verification and Validation
JPL	Jet Propulsion Laboratory
LaRC	Langley Research Center
LRU	Line Replaceable Unit
M&O	Maintenance and Operations
NASA	National Aeronautics and Space Administration
NCR	Non-Conformance Report
NEMS	NASA Equipment Management System
NSIDC	National Snow and Ice Data Center
PAIP	Performance Assurance Implementation Plan
PCARSS	Plant Clearance Automated Reutilization Screening System
PCO	Plant Clearance Office
PDO	Property Disposal Office
PI	Project Instruction
PM	preventive maintenance
PO	Purchase Order
QA	Quality Assurance
QO	Quality Office
RSC	Raytheon Systems Company
SAR	Synthetic Aperture Radar
SDPS	Science Data Processing Segment
SMO	Subcontract Management Office
SOW	Statement of Work
SW	software
UAF	University of Alaska, Fairbanks